PATENT ABSTRACTS OF JAPAN

(11)Publication number :   11-096576

(43)Date of publication of application : 09.04.1999

(51)Int.Cl.   G11B 7/125
              G11B 7/00

(21)Application number : 09-253256   (71)Applicant : CANON INC
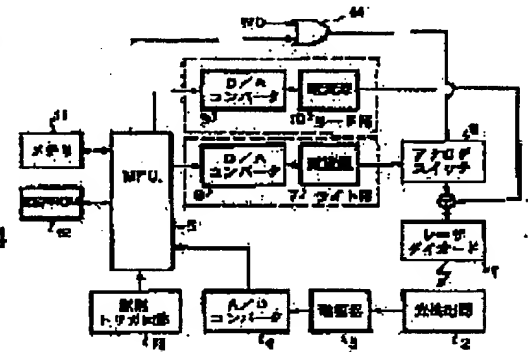
(22)Date of filing : 18.09.1997   (72)Inventor : KIMURA MASAHIKO

(54) LASER DIODE DRIVING CURRENT SEARCH METHOD AND OPTICAL INFORMATION RECORDER

(57)Abstract:

PROBLEM TO BE SOLVED: To prevent a laser diode from becoming a rated beam output or above and to search a laser diode drive current in the vicinity of the rated beam output value by calculating differential efficiency of a driving current to a beam output from the beam output in a point lower than the present driving current.

SOLUTION: An initial value of an output voltage I of a D/A converter 6 is set lower than the rated output of the laser diode 1 by considering an estimated maximum temp. change much, and the value of an A/D converter 4 corresponding to the target beam output is set in a memory 11 as a name of Pt. The output voltage I is outputted to the D/A converter 6, and the beam output value then is read by the A/D converter 4 to made it P1. The beam output value when the voltage subtracting an efficiency measuring differential amount α from the output voltage I is outputted to the converter 6 is made P2, and the differential efficiency η is calculated from the P1 and P2, and I is updated by $I = I + (Pt-P1) \div \eta$. Until the measured value P1 becomes within the error range of the target value Pt, the above processing is repeated, and the output voltage I is obtained.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision